APPL. No.: 10/520,963 DOCKET No.: MTV-055.01

In the Claims:

1. (currently amended) A compound represented by formula I:

$$RO^{RO}$$
 RO^{RO}
 RO^{RO}

wherein,

n is [[1,]] 3, or 4;

R represents independently for each occurrence H, alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)₃;

 R^1 and R^2 are independently H, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)₃; or R^1 and R^2 taken together are C(CH₃)₂, P(O)OH, or P(O)OR⁵;

 R^3 is amino, $-N_3$, or $-NH_3X$;

 R^4 represents independently for each occurrence alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)₃, or -P(O)(OR⁵)₂;

R⁵ represents independently for each occurrence H, Li⁺, Na⁺, K⁺, Rb⁺, Cs⁺, aryl, or an optionally substituted alkyl group; and

X is a halogen, alkyl carboxylate, or aryl carboxylate.

2. (canceled)

3. (original) The compound of claim 1, wherein n is 3.

- 4. (original) The compound of claim 1, wherein R is H.
- 5. (original) The compound of claim 1, wherein R¹ and R² taken together are P(O)OR⁵.
- 6. (original) The compound of claim 1, wherein R^3 is N_3 .
- 7. (original) The compound of claim 1, wherein R^3 is $-NH_3X$.
- 8. (previously presented) The compound of claim 1, wherein R⁴ represents independently for each occurrence -CH₂Ph, or -Si(alkyl)₃.
- 9. (previously presented) The compound of claim 1, wherein R⁴ represents independently for each occurrence -CH₂Ph, -or P(O)OR⁵; and R⁵ is an optionally substituted alkyl group.
- 10. (currently amended) A compound selected from the group consisting of:

APPL. No.: 10/520,963 DOCKET NO.: MTV-055.01

١

RESPONSE TO FINAL OFFICE ACTION APPL. No.: 10/520,963
DOCKET NO.: MTV-055.01

APPL. No.: 10/520,963 DOCKET NO.: MTV-055.01

11. (previously presented) A compound represented by formula II:

wherein,

n is 3, or 4;

R represents independently for each occurrence H, alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)₃;

R¹ is -(CH₂)_mCH=CH₂ or trichloroacetimidate; and

APPL. No.: 10/520,963 DOCKET No.: MTV-055.01

m is 1-6.

- 12. (canceled)
- 13. (original) The compound of claim 11, wherein n is 3.
- 14. (original) The compound of claim 11, wherein m is 3.
- 15. (original) The compound of claim 11, wherein R represents independently for each occurrence -CH₂-aryl or -Si(alkyl)₃.
- 16. (original) The compound of claim 11, wherein R represents independently for each occurrence benzyl or -Si(iPr)₃.
- 17. (previously presented) The compound of claim 11, wherein R¹ is trichloroacetimidate and R represents independently for each occurrence benzyl or -Si(iPr)₃.
- 18. (previously presented) The compound of claim 11, wherein said compound of formulaII is selected from the group consisting of:

APPL. No.: 10/520,963 DOCKET NO.: MTV-055.01

19. (previously presented) A method comprising the step of:

admixing a compound represented by
$$R_3$$
 with a compound represented by R_3 with a

APPL. No.: 10/520,963 DOCKET No.: MTV-055.01

iodosuccinimide and silver triflate, thereby forming a compound represented by

$$R^{7}O$$
 $R^{2}O$
 $R^{3}O$
 $R^{2}O$
 $R^{2}O$
 $R^{3}O$
 $R^{2}O$
 $R^{3}O$
 $R^{2}O$
 $R^{3}O$
 $R^{2}O$
 $R^{3}O$
 $R^{4}O$
 $R^{5}O$
 R

R represents independently for each occurrence H, alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)₃;

 R^1 and R^2 are independently H, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)₃; or R^1 and R^2 taken together are C(CH₃)₂, P(O)OH, or P(O)OR⁵;

 R^3 is amino, $-N_3$, or $-NH_3X$;

R⁵ represents independently for each occurrence H, Li⁺, Na⁺, K⁺, Rb⁺, Cs⁺, aryl, or an optionally substituted alkyl group;

R⁶ is alkyl or aryl;

 R^7 is alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)₃; and

X is a halogen, alkyl carboxylate, or aryl carboxylate.

- 20. (original) The method of claim 19, wherein R is -CH₂-aryl.
- 21. (original) The method of claim 19, wherein R^1 and R^2 taken together are $C(CH_3)_2$.
- 22. (original) The method of claim 19, wherein R³ is -N₃.
- 23. (original) The method of claim 19, wherein R⁶ is alkyl.
- 24. (original) The method of claim 19, wherein R⁷ is -C(O)-alkyl.
- 25. (original) The method of claim 19, wherein R is benzyl, R^1 and R^2 taken together are $C(CH_3)_2$, and R^3 is $-N_3$.
- 26. (original) The method of claim 19, wherein R is benzyl, R^1 and R^2 taken together are $C(CH_3)_2$, R^3 is $-N_3$, and R^6 is ethyl.
- 27. (previously presented) A method of preparing a tetrasaccharide, comprising the steps of:

APPL. No.: 10/520,963 DOCKET NO.: MTV-055.01

covalently binding a mannopyranoside to a solid support to provide a first substrate, reacting said first substrate with a mannopyranose trichloroacetimidate to give a disaccharide bound to said solid support, reacting said disaccharide with a mannopyranose trichloroacetimidate to give a triisaccharide bound to said solid support, reacting said trisaccharide with a mannopyranose trichloroacetimidate to give a tetrasaccharide bound to said solid support, and cleaving said tetrasaccharide from said solid support.

- 28. (original) The method of claim 27, wherein said mannopyranoside is bound to said solid support through a glycosidic linkage.
- 29. (original) The method of claim 27, wherein said tetrasaccharide is cleaved from said solid support using Grubbs' catalyst.
- 30. (previously presented) The method of claim 27, wherein said tetrasaccharide is

APPL. No.: 10/520,963 DOCKET NO.: MTV-055.01

31. (previously presented) A compound represented by formula I:

wherein,

R represents independently for each occurrence H, alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)₃;

 R^1 and R^2 are independently H, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)₃; or R^1 and R^2 taken together are C(CH₃)₂, P(O)OH, or P(O)OR⁵;

 R^3 is amino, $-N_3$, or $-NH_3X$;

 R^4 represents independently for each occurrence H, alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)₃, or -P(O)(OR⁵)₂;

R⁵ represents independently for each occurrence H, Li⁺, Na⁺, K⁺, Rb⁺, Cs⁺, aryl, or an optionally substituted alkyl group; and

 R^6 represents independently for each occurrence alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)₃, or -P(O)(OR⁵)₂;

APPL. No.: 10/520,963 DOCKET No.: MTV-055.01

X is a halogen, alkyl carboxylate, or aryl carboxylate.

- 32. (previously presented) The compound of claim 31, wherein R is H.
- 33. (previously presented) The compound of claim 31, wherein R¹ and R² taken together are P(O)OR⁵.
- 34. (previously presented) The compound of claim 31, wherein R³ is -NH₃X.
- 35. (previously presented) The compound of claim 31, wherein R⁴ is H.
- 36. (previously presented) The compound of claim 31, wherein R⁶ is -P(O)(OR⁵)₂.
- 37. (previously presented) The compound of claim 31, wherein R is H; R¹ and R² taken together are P(O)OR⁵; R³ is -NH₃X; R⁴ is H; and R⁶ is -P(O)(OR⁵)₂.
- 38. (new) A compound represented by formula I:

wherein,

n is 1;

R represents independently for each occurrence H, alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, or -Si(alkyl)₃;

 $R^1 \ \text{is -CH}_2\text{-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)}_{3;}$

 R^2 is -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)₃; or R^1 and R^2 taken together are C(CH₃)₂, P(O)OH, or P(O)OR⁵;

APPL. No.: 10/520,963 DOCKET No.: MTV-055.01

 R^3 is amino, $-N_3$, or $-NH_3X$;

R⁴ represents independently for each occurrence alkyl, aryl, -CH₂-aryl, -C(O)-alkyl, -C(O)-aryl, -Si(alkyl)₃, or -P(O)(OR⁵)₂;

R⁵ represents independently for each occurrence H, Li⁺, Na⁺, K⁺, Rb⁺, Cs⁺, aryl, or an optionally substituted alkyl group; and

X is a halogen, alkyl carboxylate, or aryl carboxylate.